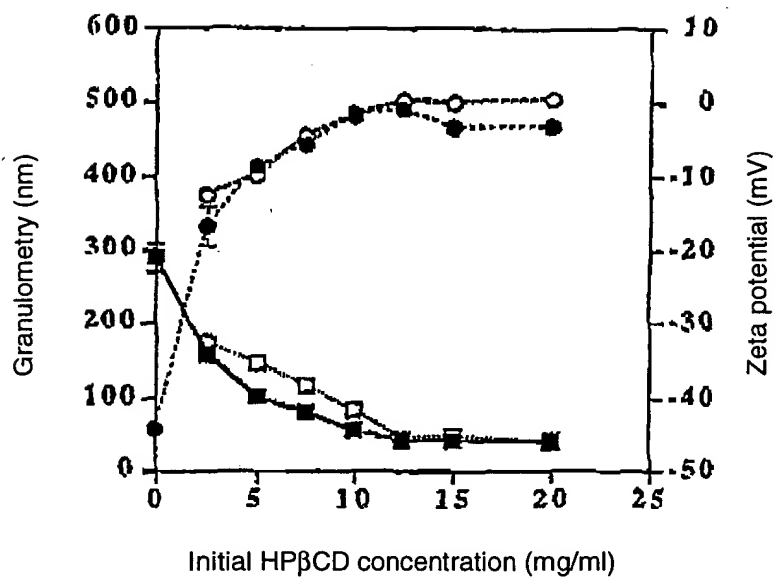


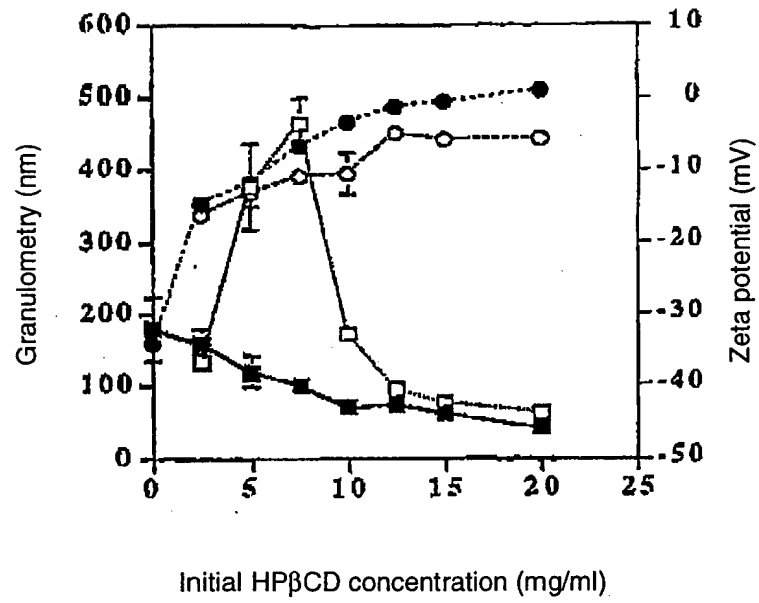
Fig.1



PARTICLE SIZE AND ZETA POTENTIAL OF NANOPARTICLES PREPARED IN THE PRESENCE OF HPβCD

- Granulometry of nanoparticles with 1% Poloxamer 188
- Granulometry of nanoparticles without Poloxamer 188
- Zeta potential of nanoparticles with 1% Poloxamer 188
- Zeta potential of nanoparticles without Poloxamer 188

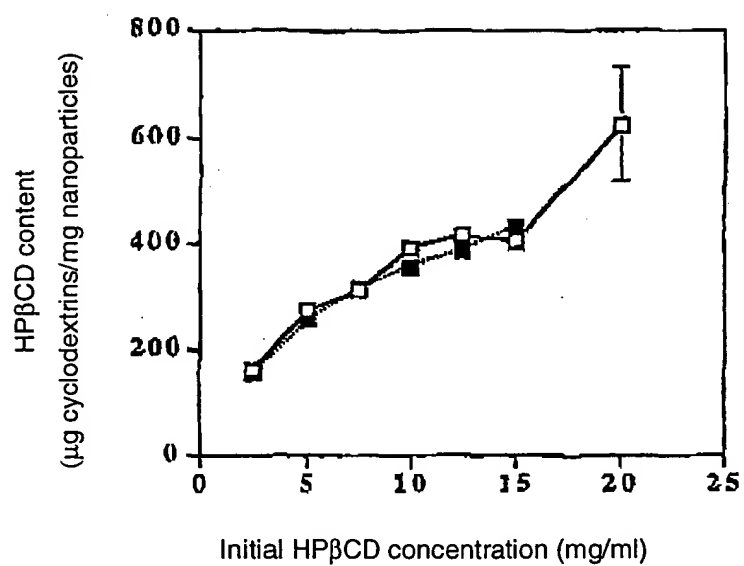
Fig.2



NANOPARTICLES OF PIBCA / HPβCD PREPARED IN THE PRESENCE OF THE  
PROGESTERONE / HPβCD COMPLEX

- Granulometry of nanoparticles with 1% Poloxamer 188
- Granulometry of nanoparticles without Poloxamer 188
- Zeta potential of nanoparticles with 1% Poloxamer 188
- Zeta potential of nanoparticles without Poloxamer 188

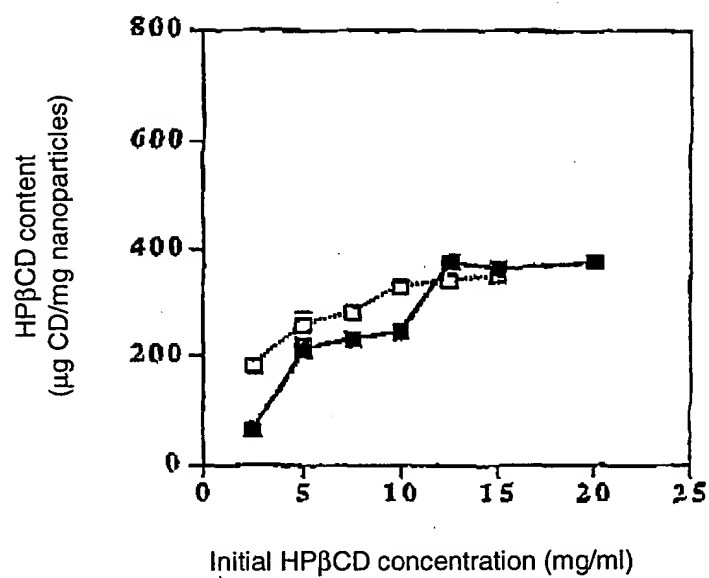
Fig.3



#### HPβCD CONTENT IN FREE (NON-CHARGED) NANOPARTICLES

- with 1% Poloxamer 188
- without Poloxamer 188

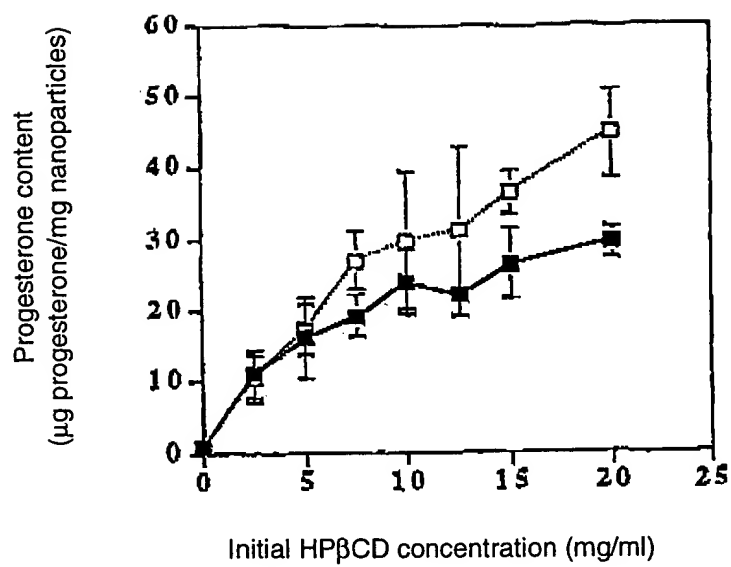
Fig.4



HPβCD CONTENT IN NANOPARTICLES PREPARED IN THE PRESENCE OF THE  
PROGESTERONE / HPβCD COMPLEX

- with 1% Poloxamer 188
- without Poloxamer 188

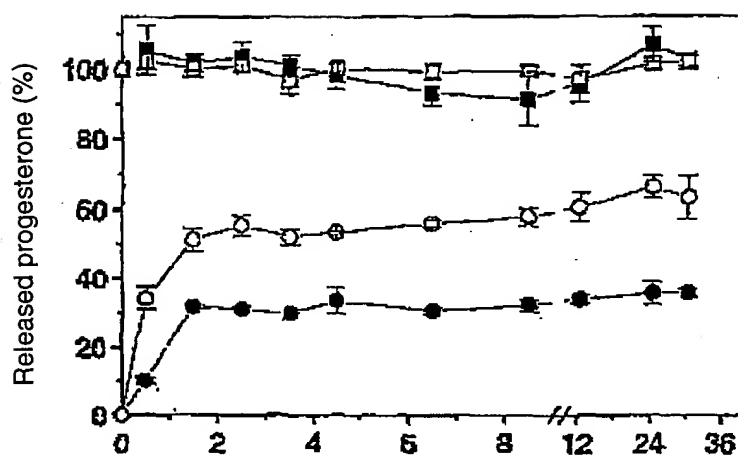
Fig.5



#### PROGESTERONE CONTENT OF PIBCA / HPβCD NANOPARTICLES

- with 1% Poloxamer 188
- without Poloxamer 188

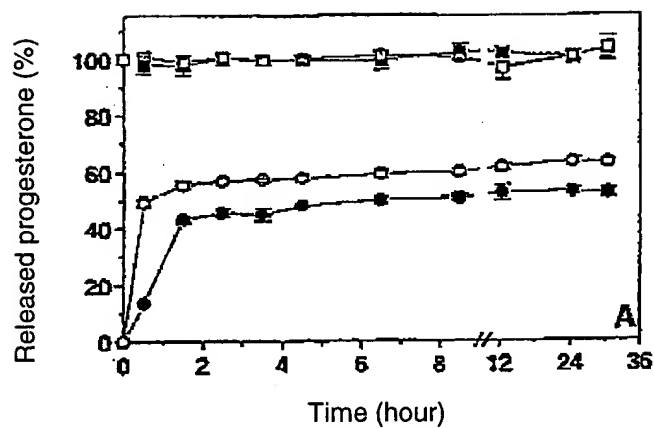
Fig.6



INFLUENCE OF PARTICLE SIZE ON THE RATE OF RELEASE OF PROGESTERONE IN ALKALINE BORATE BUFFER (ABB : pH 8.4) FROM PIBCA / HPβCD NANOPARTICLES

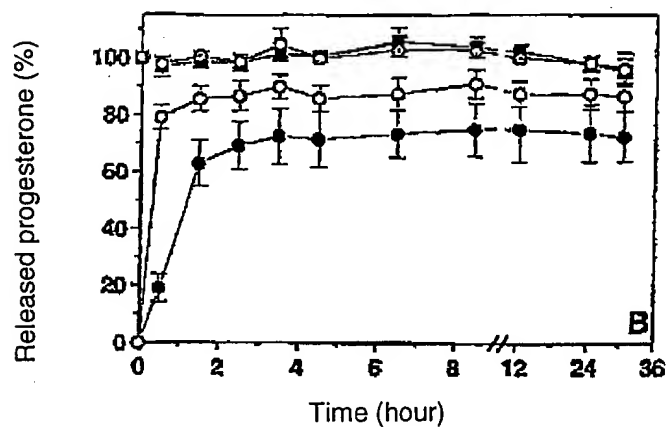
- Progesterone solution
- HPβCD / progesterone in complex form
- nanoparticles of 150 nm (PIBCA / HPβCD)
- nanoparticles of 70 nm (PIBCA / HPβCD)

Fig.7 / A



A = ABB : PEG 400 (80 : 20)

Fig. 7 / B

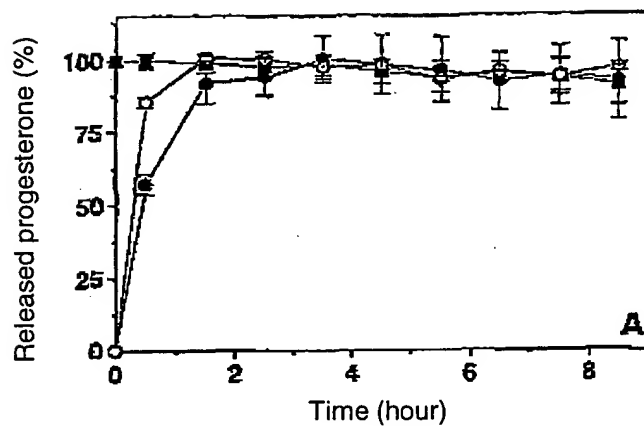


B = ABB : PEG 400 (60 : 40)

INFLUENCE OF THE CONSTITUTION OF THE RELEASE MEDIUM ON THE RELEASE RATE OF PROGESTERONE IN ABB MEDIUM (pH 8.4) FROM PIBCA / HPβCD NANOPARTICLES

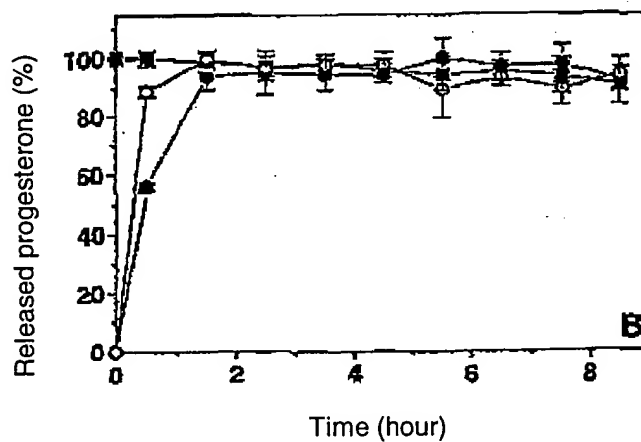
- Progesterone solution
- HPβCD / Progesterone in complex form
- nanoparticles of 150 nm
- nanoparticles of 70 nm

Fig.8 / A



A = Esterase medium 25 IU

Fig. 8 / B



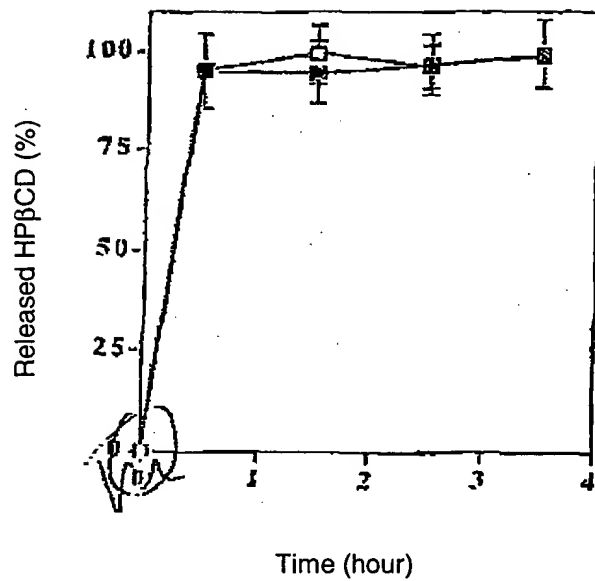
B = Esterase 100 IU

INFLUENCE OF THE PRESENCE OF ESTERASE-TYPE ENZYMES ON THE RELEASE RATE OF PROGESTERONE IN ABB MEDIUM (pH 8.4) FROM PIBCA / HPβCD NANOPARTICLES

- Progesterone solution
- HPβCD / progesterone in complex form
- nanoparticles of 150 nm
- nanoparticles of 70 nm



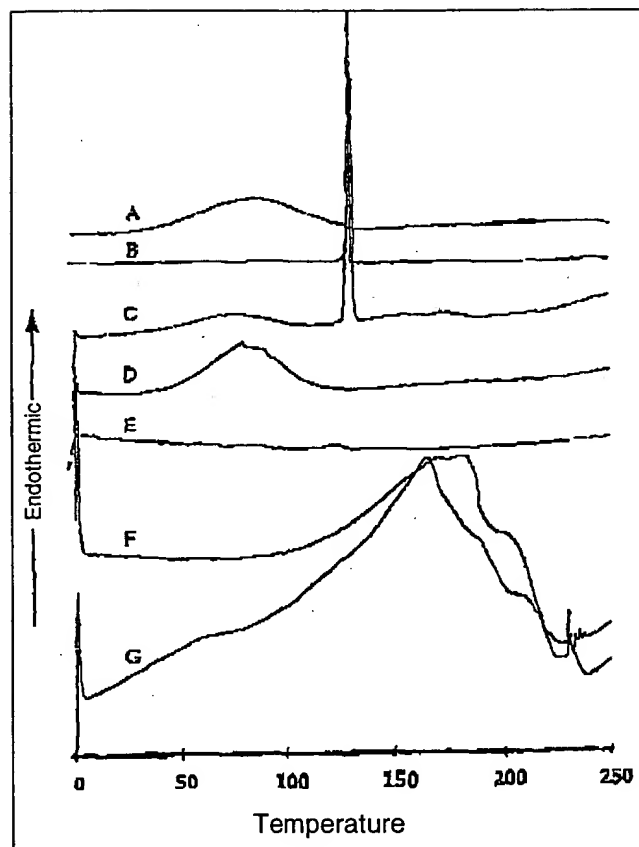
Fig. 9



RATE OF RELEASE OF HPβCD IN ABB MEDIUM (pH 8.4) FROM PIBCA / HPβCD NANOPARTICLES

- nanoparticles of 150 nm
- nanoparticles of 70 nm

Fig. 10



DIFFERENTIAL SCANNING CALORIMETRY (DSC) TRACINGS OBTAINED WITH A TEMPERATURE RISE RATE OF 10°C / min.

- A = HP $\beta$ CD
- B = Progesterone
- C = Physical mixture of HP $\beta$ CD Progesterone (5 : 1 W/W)
- D = HP $\beta$ CD : progesterone complex
- E = PIBCA
- F = Progesterone-containing nanoparticles of PIBCA / HP $\beta$ CD (2.5 mg/ml HP $\beta$ CD)
- G = Progesterone-containing nanoparticles of PIBCA / HP $\beta$ CD (10.0 mg/ml of HP $\beta$ CD in medium).